REMARKS

A. GENERALLY

Applicant wishes to thank the examiner for the opportunity to discuss the Office Action dated June 16, 2005 and the Nilsen reference.

B. THE CLAIMS

Claims 1-32 remain in this application. Claims 1 and 30-32 have been amended.

Claims 1-9, 11-28, and 30-32 have been rejected under 35 U.S.C. § 103(a) as being obvious over Nilsen (U.S. Patent 5,987,306) in view of Buchbinder (U.S. Patent Publication 2002-0078198). Claim 10 has been rejected under 35 U.S.C. § 103(a) as being obvious over Nilsen in view of Buchbinder and further in view of Martin (U.S. Patent 6,363,419). Claim 29 has been rejected under 35 U.S.C. § 103(a) as being obvious over Nilsen in view of Buchbinder and further in view of Reeves (U.S. Patent 5,918,023).

C. CLAIM REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 1-9, 11-28, and 30-32 have been rejected under 35 U.S.C. § 103(a) as being obvious over Nilsen (patent US 5987306) in view of Buchbinder (patent publication US 2002-0078198). Claim 10 has been rejected under 35 U.S.C. § 103(a) as being obvious over Nilsen in view of Buchbinder and further in view of Martin (patent US 6363419). Claim 29 has been rejected under 35 U.S.C. § 103(a) as being obvious over Nilsen in view of Buchbinder and further in view of Reeves (patent US 5918023). These rejections are respectfully traversed based on the following arguments.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). MPEP §2143.03, 8th Ed. (Rev. 2, 2004). Further, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art." MPEP §2143.01, 8th Ed. (Rev. 2, 2004).

Claim 1 (as amended) of the application as examined reads as follows:

> 1. A measuring system for measuring data quality of service on at least one traffic wireless network, comprising:

a plurality of remote units for performing measurements on the at least one traffic wireless network, each of the plurality of remote units implementing a Wireless Data Protocol (WDP) client, each of the plurality of remote units comprising:

at least one test traffic modem adapted to connect to one or more of the at least one traffic wireless networks,

a control link modem, and

a control unit coupled to the test traffic modem and to the control link modem; and

a back end processor for remotely controlling the plurality of remote units, the back end processor being in direct communication with each of the plurality of remote units via a control link and exchanging commands and responses with the control link modem via the control link;

wherein selected ones of the plurality of remote units simulate operation of a WDP enabled wireless device by having the WDP client access the at least one traffic wireless network via the test traffic modem.

Claim 1 was rejected under 35 U.S.C. §103(a) as being unpatentable over Bologh over Nilsen (patent US 5987306) in view of Buchbinder (patent publication US 2002-0078198). Nilsen generally describes a wireless network testing system comprising a fixed test unit (FTU) and a mobile test unit (MTU) that facilitate collecting data regarding the performance of a wireless network and communicating that data to a network operator or operation center (CU).

In order to evaluate the limitations of claim 1 against the disclosure of Nilsen, it is important to understand the functionality of the system components as described in Nilsen:

The most important components which are part of the system according to the invention thus comprise a mobile test unit (MTU) and a fixed test unit (FTU), the mobile test unit preferably being designed as an autonomous module, capable of receiving orders from and supply results to a fixed unit. The mobile unit may be programmed or ordered to carry out quality observations comprising the radio signal level on one or several defined channels, signalling of decoding , calculations of bit error rate, performing analogous measurings, both "down-link" and "up-link", and log position information.

Results observed by the mobile unit will suitably be reported back to the fixed unit for accumulation of statistics, and the mobile unit may suitably comprise a micro processor and be placed in a suitable vessel/vehicle.

The fixed unit which communicates with the mobile unit may constitute the operator's point of access to the system as to specification of parameters, definition of tasks, presentation of status of service, and ordering of presentations of results. (Nilsen, Col. 2, lines 12-31; emphasis added by underlining.)

The orders are generated by a component of the CU:

The said server CeNAS has as its task to relay measurement orders from the database management system DBMS to the flexible test units FTU, as well as the measuring results from the said flexible test units FTU to the database management system DBMS. The results may comprise data from observations of quality from the fixed test unit FTU concerned, or comprise results received by the latter from relevant mobile test units MTU for storage in the database management system DBMS. (Nilsen, Col. 5, lines 14-18; emphasis added by underlining).

And,

In other words, the server CeNAS constitutes a central part for the said CeNA system and may for instance be implemented in a UNIX configuration, the server generally residing in the same computer as the one comprising the server platform for the database management system DBMS. It should be understood that the server communicates with the fixed test units FTU via the network mentioned previously, TCP/IP. As mentioned above, each of the fixed test units FTU is employed in announcing calls via the network PSTN to the individual mobile test units MTU and to answer calls from the said mobile test units MTU in the mobile network CeN. The fixed test units FTU thus have as their task to relay calls to selected mobile test units MTU and thereby communicate measurement orders, to evaluate their own measuring orders with regard to the time for calling mobile test units, to initiate calls to mobile test units MTU in the mobile network CeN, and also to measure selected parameters for originating calls, and, finally, to answer calls from mobile test units MTU and to receive observations of quality from there. (Nilsen, Col. 5, lines 29-48; emphasis added by underlining).

Applicant submits that reading Nilsen as a whole demonstrates that the measurement orders are conveyed to the mobile test units through the fixed test unit. That is, these measurement orders are not communicated over a link dedicated for communications between the mobile test units and the Nilsen front end. Nilsen does not teach or describe such a dedicated link. In addition, because Nilsen describes the MTU and FTU as the "most important components of the system" (i.e., by using words of limitation), modification of these structures to perform other tasks is contrary to the teachings the Nilsen.

Reviewing the claim rejections in this light, Applicant submits that the combination of Nilsen and Buchbinder does not teach or suggest all of the limitations of claim 1 (as amended) and does not, therefore, support a prima facie case of obviousness.

The office action concluded that Nilsen disclosed a remote unit comprising a test traffic modem and a control link modem as recited in claim 1 of the present application. However, Nilsen does not expressly describe two distinct modems.

> The communication between the mobile test units MTU and fixed test units FTU is implemented via a special modem. (Nilsen, Col.8, line 19-20; emphasis added by underlining).
>
> The relevant mobile test unit MTU will start transmission of results to the relevant fixed test unit FTU as soon as a conversation has been established via the said MTU modem. This means that the results will be transmitted simultaneously with new results being obtained or acquired. This entails a transmission of the result more or less in real time. (Nilsen, Col. 13, lines 22-24; emphasis added by underlining.)

The office action equated the MTU modem with the control link modem of claim 1 (as amended). The traffic modem was equated to the "test mobile" that is recited in the specification, but not actually described.

> Each of the mobile test units MTU may suitably be built as an integrated unit comprising a micro computer, a test mobile, a positioning system, e.g. GPS, as well as communications equipment. (Nilsen, Col. 6, lines 12-15; emphasis added by underlining.)

According to the analysis in the office action, the MTU modem performs the tasks of the claimed control link modem and the test mobile performs the roles of the claimed traffic modem. This conclusion, however, is not consistent with the described functionality of the claimed inventions of the present Application and the contrasting roles defined in the Nilsen patent for the test mobile and the MTU modem.

According to specification of the present application:

> FIG. 3b differs from FIG. 3a in that the single control link and traffic modem **306** has been divided into a separate control link modem **308** and traffic modem **310**. The advantage of separating the control link modem **308** from the traffic modem **310** is that it allows the remote unit **300** to communicate control information and traffic information over different communication networks. (Specification, ¶117.)

All traffic measurement information in Nilsen is communicated to the FTU:

> The mobile test units MTU mentioned will originate and answer calls in the mobile network concerned in accordance with given measurement orders, and the measurements carried out will be sent back to one or several fixed test units FTU very nearly in real-time. In the event of a dropped call, the mobile test unit MTU concerned will temporarily store the results in its own internal storage device, in order suitably to transfer these at a later time. (Nilsen, Col. 6, lines 5-12; emphasis added by underlining).

The Nilsen specification makes it clear that the function of the MTU modem is to provide data to the FTU. Thus, the MTU modem cannot be equated to the control link modem. The test

mobile's function is to receive the data from the tested network, not to report it. It is not functioning as a traffic modem as claimed. Further, as discussed below, Nilsen does not describe the control link recited in claim 1 (as amended).

In addition, because Nilsen describes the MTU and FTU as the "most important components of the system" (i.e., by using words of limitation), modification of these structures to perform the tasks described in claim 1 (as amended) is contrary to the teachings the Nilsen.

Claim 1 (as amended) also recites the limitation, "a control unit coupled to the test traffic modem and to the control link modem." According to the office action, this was met by the disclosure in Nilsen that,"[r]esults observed by the mobile unit will suitably be reported back to the fixed unit for accumulation of statistics, and the mobile unit may suitably comprise a micro processor and be placed in a suitable vessel/vehicle." (Nilsen, Col. 2, lines 23-26). However, the cited language does not disclose a connection between the "micro-processor" and the special modem and the test mobile. Because the actual function of the micro processor in Nilsen is never fully described, any suggestion that the test mobile and the special modem are connected would be speculation at best.

Claim 1 (as amended) further recites the limitation, "a back end processor for remotely controlling the plurality of remote units, the back end processor being in direct communication with each of the plurality of remote units via a control link and exchanging commands and responses with the control link modem via the control link." The office action equated the front end processor of Nilsen to the backend processor of the application. The control link was equated to channel frequency cited in the following excerpt from Nilsen:

> It should furthermore be understood that "on being triggered" entails a specification of the serviced cell BSiC concerned, and its pertaining channel frequency ARFCN which is being used as a condition for performing the measurement, which may mean that if the option "on being triggered" is selected, measurements will only be carried out provided the relevant mobile test unit MTU is being held firmly to a given pair of serviced cell and channel frequency, BSiC/ARFCN, at the time of evaluation. (Nilsen, Col. 11, lines 32-40).

However, channel frequency ARFCN is not being used as a control link, but a trigger. The trigger is not a communication link with the back end processor but is independent of it:

> on being triggered, where measurements commence when the mobile test unit MTU concerned receives from the specified base station BTS and/or carrier frequency. (Nilsen, Col. 11, lines 8-10.)

As demonstrated above, measurement orders in the Nilsen system come from the CU via the fixed unit to the mobile unit and are not transmitted via a control channel as required in claim 1 (as amended).

Claim 1 (as amended) also recites the limitation, "wherein selected ones of the plurality of remote units simulate operation of a WDP enabled wireless device by having the WDP client access the at least one traffic wireless network via the test traffic modem." The office action acknowledges that Nilsen did not teach this limitation. Applicant submits that there is no motivation to combine the reference with Nilsen that can be identified within the references themselves. Nilsen describes the MTU and FTU as the "most important components of the system" (i.e., by using words of limitation). This limiting language militates against modification of these structures to perform other tasks not defined in the Nilsen specification.

Buchbinder is directed to solving a problem that is significantly different from the problem addressed by the present invention:

> A firewall penetration scheme is described for communication between two networked computers. A first computer within a firewall protected network initiates a connection to a second computer. The second computer is coupled to a network of remote clients that are configured to access the first computer. The first computer transmits a message to the second computer commanding the second computer to connect back to the first computer[.] A series of tests using communication protocols of increasing complexity are executed until a communication protocol enabling communication between the first and second computers is determined. If the address of the first computer changes upon connection, the second computer registers the new address upon each change. If the connection between the first computer and second computer is unintentionally broken, the first computer re-establishes contact with the second computer and maintains the connection by transmitting periodic signals to the second computer. (Buchbinder, Abstract.)

Applicant submits that one skilled in the art facing the problem that Applicant sought to solve in this case would not be motivated to consider the Buchbinder reference, much less attempt to combine it with Nilsen. It is difficult to image how such a combination would function without contravening the purpose of Nilsen.

Claims 2-9 and 11-28 depend from claim 1 (as amended) and thereby recite all of the limitations of claim 1 as amended. As demonstrated above, claim 1 (as amended) is patentable over the combination Nilsen and Buchbinder. It follows that claims 2-9 and 11-28 recite are also patentable over the cited prior art.

Claim 10 has been rejected based on the combination of Nilsen, Buchbinder and Martin. The addition of Martin does not cure the deficiencies of the combination of Nilsen and Buchbinder as previously described. Claim 10 depends from claim 1 (as amended) and recites the limitations of claim 1 (as amended) discussed above that are not taught or disclosed by Nilsen. Because the combination of references cited in the office action do not teach or describe all of the limitations of claim 10, claim 10 is patentable over the cited prior art.

Claim 29 has been rejected based on the combination of Nilsen, Buchbinder and Revees. The addition of Reeves does not cure the deficiencies of the combination of Nilsen and Buchbinder as previously described. Claim 29 depends from claim 1 (as amended) and recites the limitations of claim 1 (as amended) discussed above that are not taught or disclosed by Nilsen. Because the combination of references cited in the office action do not teach or describe all of the limitations of claim 29, claim 29 is patentable over the cited prior art.

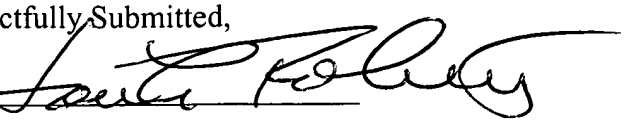
Claims 30-32 have been rejected under 35 U.S.C. § 103(a) as being obvious over Nilsen in view of Buchbinder. However, the office action provided no specific basis for this rejection. Applicant submits that claims 30-32 are patentable over the cited prior art for the same reasons provided in distinguishing claim 1 (as amended) from the combination of Nilsen and Buchbinder.

D. CONCLUSION

In view of the above information and remarks, Applicant respectfully requests reconsideration of the current rejections. For the reasons stated above, Applicant respectfully submits that the application is in condition for allowance with claims 1-32. Should any further questions arise concerning this application or in the event the above amendments do not place the application in condition for allowance, Applicant respectfully requests that a non-final office action be issued so as to allow the Applicant the opportunity to independently ascertain the appropriateness of the prior art cited by the examiner in support of the rejections issued in the June 16, 2005 office action. Attorney for the Applicant may be reached at the number listed below.

The Director of the U.S. Patent & Trademark Office is authorized to charge any necessary fees, and conversely, deposit any credit balance, to Deposit Account No. 18-1579.

Respectfully Submitted,

By 

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